

# ARS □ CSREES □ ERS □ NASS

## *Policies and Procedures*

***Title:*** Radiation Safety Program

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This P&P states ARS Radiation Safety Policy; describes the ARS Radiation Safety Program; and assigns responsibilities for implementing the ARS Radiation Safety Program.

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# **1. Introduction**

Radioactive materials and radiation emitting equipment produce ionizing radiation that can pose a risk to health and the environment if not controlled.

ARS is committed to the protection of all personnel and the environment at ARS facilities so as to effectively minimize hazards and risks to exposure to ionization radiation. This commitment is expressed through policies, programs, and operating procedures that control the acquisition, use, and disposition of all materials and equipment that produces ionizing radiation.

## **2. Statement of Policy**

It is ARS policy to:

- Maintain an ARS Radiation Safety Program;
- Protect its employees, visitors, and the environment at ARS facilities from the potential hazards and risks from exposure to ionizing radiation; and
- comply with all applicable Federal, State and local regulations governing the acquisition, use, and disposition of radioactive materials and radiation emitting devices.

## **3. Authorities**

- Departmental Regulation 4400-5, Radiation Safety Program.
- Title 10 CFR, Nuclear Regulatory Commission, Chapter 1,  
Part 19: Notices, Instructions, and Reports to Workers; Inspections;  
Part 20: Standards for Protection Against Radiation;  
Part 21: Reporting of Defects and Noncompliance; and  
Part 30: Domestic Licensing of Byproduct Material.
- Title 21 CFR, Food and Drug Administration, Chapter 1, Part 1020: Performance Standards for Ionizing Radiation Emitting Products.
- Title 29 CFR, Occupational Safety and Health Administration, Chapter 17, Part 1910.96: Occupational Safety and Health Standards - Ionizing Radiation.

- Title 40 CFR, Environmental Protection Agency, Chapter 1: Protection of the Environment.
- Title 49 CFR, Department of Transportation, Subtitle B, Chapter 1, Subchapter C, Parts 171-178: Hazardous Materials Regulations.
- U.S. Department of Commerce, National Bureau of Standards, Handbook 111: Radiation Safety for X-ray Diffraction and Fluorescence Analysis Equipment (Revised 1977).
- Electron Microscopy Safety Handbook, V.C. Barker and D.L. Clayton, eds. San Francisco Press, Inc., CA, 1985.
- National Council on Radiation Protection and Measurements, Bethesda, MD:  
     NCRP Report No. 36: Radiation Protection in Veterinary Medicine, 1970.  
     NCRP Report No. 59, Operational Radiation Safety Program, 1978.  
     NCRP Report No. 102, Medical X-ray, Electron Beam and Gamma-ray Protection for Energies up to 50 MeV (Equipment Design, Performance, and Use), 1989.
- U.S. Department of Agriculture, Departmental Regulation 1650-3: Radon Program, February 25, 1991.
- U.S. Department of Agriculture, Departmental Regulation 1800-1: Departmental Emergency Programs Responsibilities, March 5, 1993.

## 4. Compliance

All ARS locations where ARS personnel are involved with the use of materials, sources, or equipment that produces ionizing radiation, shall comply with this Directive. In addition, ARS shall require that ARS locations on university campuses and ARS personnel in university facilities who operate under the university held permit will develop a memorandum of understanding between the ARS unit and the university as an alternative to this directive.

## 5. Summary of Responsibilities

The overall responsibility for the USDA Radiation Safety Program (RSP) has been delegated from the Secretary of Agriculture to the Assistant Secretary for Administration. Routine operational aspects of the RSP have been delegated through the Director, Safety and Health Management Division, OP, to the Director, Radiation Safety Staff.

## **The Administrator, ARS**

- Is responsible for the implementation of the Department's Radiation Safety Program within the Agricultural Research Service. These responsibilities include:
  - Assuring that the Agency is in compliance with applicable Departmental, Federal, State and local rules and regulations governing the use of radioactive materials and radiation emitting devices.
  - Nominating members, alternates, and technical representatives with alternates to the Department's Radiation Safety Committee. The designated member serves as the Agency's point of contact for radiation safety program issues.

## **Area Directors**

- Responsible for supporting the ARS/USDA Radiation Safety Program. These responsibilities include:
  - Providing assistance to the Departmental Radiation Safety Staff to resolve Radiation Safety Program issues.
  - Delegation of routine program oversight to the Area Safety and Health Manager or other appropriate management official.
  - Reviewing new and renewal applications for the use of radioactive materials and radiation emitting equipment in their Area.

## **Institute/Center/Location Directors**

- Assure that the facility is in compliance with applicable Departmental, Federal, State and local rules and regulations governing the use of radioactive materials and radiation emitting devices.
- Appoint a Location Radiation Protection Officer to manage the day-to-day activities of the facility's Radiation Safety Program and to serve as a liaison between the facility and the Department's Radiation Safety Staff.

## **Location Radiation Safety Officers**

- Coordinate the Departmental/Agency Radiation Safety Program at the facility.
- Serve as a liaison between the facility and the Department's Radiation Safety Branch.

- Assist the Radiation Safety Staff in performing reviews of the Radiation Safety Program.

### **Research Leaders/SY's**

- Review permit applications for the use or storage of radioactive materials or radiation emitting devices at their facility.
- Assure that the individuals who they supervise comply with the rules and regulations for the safe use of radioactive materials and radiation emitting devices.

### **ARS Permit Holders**

- Inform and obtain written concurrence from the Research Leader, Location Radiation Protection Officer, Facility Management, and Area Director for all new and renewal applications for the use of radioactive materials and radiation emitting equipment.
- Responsible for the proper procurement, use, and disposition of radioactive materials or radiation emitting devices covered by their permit.
- Promptly report accidents, incidents or any other use of radioactive materials or radiation emitting devices that may cause the Agency or Department to be in non-compliance with applicable Federal, State or local rules or regulations.

## **6. Glossary/Abbreviations**

<b>CFR</b>	Code of Federal Regulations
<b>DR</b>	Departmental Regulation
<b>LRPO</b>	Location Radiation Protection Officer
<b>NRC</b>	Nuclear Regulatory Commission
<b>RSC</b>	Radiation Safety Committee
<b>RSO</b>	Radiation Safety Officer
<b>RSP</b>	Radiation Safety Program
<b>RSS</b>	Radiation Safety Staff

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